

SEQLIST
SEQUENCE LISTING

<110> Zhang, Dongxiao
Yu, Guoliang
Pytela, Robert
Couto, Joseph

<120> Humanized Rabbit Antibodies

<130> EPIT-001

<140> filed herewith
<141>

<150> 60/404,117
<151> 2002-08-15

<160> 63

<170> FastSEQ for windows Version 4.0

<210> 1
<211> 84
<212> PRT
<213> Oryctolagus cuniculus

```
<400> 1
Gln Ser Val Glu Glu Ser Gly Gly Arg Leu Val Thr Pro Gly Thr Pro
 1          5          10          15
Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Trp Val Arg
          20          25          30
Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Gly Arg Phe Thr Ile Ser
          35          40          45
Lys Thr Ser Thr Thr Val Asp Leu Lys Ile Thr Ser Pro Thr Thr Glu
          50          55          60
Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Thr Gly Thr Leu Val
65          70          75          80
Thr Ile Ser Ser
```

<210> 2
<211> 86
<212> PRT
<213> Oryctolagus cuniculus

```
<400> 2
Gln Ser Val Lys Glu Ser Glu Gly Gly Leu Phe Lys Pro Thr Asp Thr
 1          5          10          15
Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Trp Val Arg
          20          25          30
Gln Ala Pro Gly Asn Gly Leu Glu Trp Ile Gly Arg Ser Thr Ile Thr
          35          40          45
Arg Asn Thr Asn Leu Asn Thr Val Thr Leu Lys Met Thr Ser Leu Thr
          50          55          60
Ala Ala Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Gln Gly Thr
65          70          75          80
Leu Val Thr Val Ser Ser
          85
```

SEQLIST

<210> 3
 <211> 85
 <212> PRT
 <213> *Oryctolagus cuniculus*

<400> 3
 Gln Ser Leu Glu Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Ala Ser
 1 5 10 15
 Leu Thr Leu Thr Cys Thr Ala Ser Gly Phe Ser Phe Ser Trp Val Arg
 20 25 30
 Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Ala Arg Phe Thr Ile Ser
 35 40 45
 Lys Thr Ser Ser Thr Thr Val Thr Leu Gln Met Thr Ser Leu Thr Ala
 50 55 60
 Ala Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Pro Gly Thr Leu
 65 70 75 80
 Val Thr Val Ser Ser
 85

<210> 4
 <211> 87
 <212> PRT
 <213> *Homo sapiens*

<400> 4
 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
 20 25 30
 Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
 35 40 45
 Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
 50 55 60
 Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Trp Gly Arg Gly
 65 70 75 80
 Thr Leu Val Thr Val Ser Ser
 85

<210> 5
 <211> 87
 <212> PRT
 <213> *Homo sapiens*

<400> 5
 Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Ile Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Trp Val
 20 25 30
 Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
 35 40 45
 Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
 50 55 60
 Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
 65 70 75 80
 Thr Met Val Thr Val Ser Ser
 85

<210> 6
 <211> 87
 <212> PRT

SEQLIST

<213> Homo sapiens

<400> 6

```

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1          5          10          15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Trp Val
          20          25          30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
          35          40          45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
          50          55          60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65          70          75          80
Thr Thr Val Thr Val Ser Ser
          85

```

<210> 7

<211> 87

<212> PRT

<213> Mus musculus

<400> 7

```

Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
 1          5          10          15
Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Trp Val
          20          25          30
Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Leu Gly Arg Leu Ser Ile
          35          40          45
Ser Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn Ser Leu
          50          55          60
Gln Thr Asp Asp Thr Ala Met Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65          70          75          80
Thr Leu Val Thr Val Ser Ala
          85

```

<210> 8

<211> 87

<212> PRT

<213> Mus musculus

<400> 8

```

Glu Val Met Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1          5          10          15
Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
          20          25          30
Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Arg Phe Thr Ile
          35          40          45
Ser Arg Asp Asn Ala Lys Asn Asn Leu Tyr Leu Gln Met Ser Ser Leu
          50          55          60
Arg Ser Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg Trp Gly Ala Gly
65          70          75          80
Thr Thr Val Thr Val Ser Ser
          85

```

<210> 9

<211> 87

<212> PRT

<213> Mus musculus

<400> 9

SEQLIST

Glu Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
 20 25 30
 Arg Gln Ser Pro Glu Lys Arg Leu Glu Trp Val Ala Arg Phe Thr Ile
 35 40 45
 Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Ser Ser Leu
 50 55 60
 Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Thr Arg Trp Gly Gln Gly
 65 70 75 80
 Thr Thr Leu Thr Val Ser Ser
 85

<210> 10
 <211> 80
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 10
 Ala Tyr Asp Met Thr Gln Thr Pro Ala Ser Val Glu Val Ala Val Gly
 1 5 10 15
 Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Arg
 20 25 30
 Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
 35 40 45
 Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Glu Cys Ala Asp
 50 55 60
 Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Glu Val Val Val Lys
 65 70 75 80

<210> 11
 <211> 80
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 11
 Asp Val Val Met Thr Gln Thr Pro Ala Ser Val Ser Glu Pro Val Gly
 1 5 10 15
 Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30
 Pro Lys Leu Leu Ile Ser Gly Val Ser Ser Arg Phe Lys Ala Ser Arg
 35 40 45
 Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
 50 55 60
 Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Val Val Val Glu
 65 70 75 80

<210> 12
 <211> 80
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 12
 Ala Leu Val Met Thr Gln Thr Pro Ala Ser Val Ser Ala Ala Val Gly
 1 5 10 15
 Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30
 Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Arg
 35 40 45
 Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Arg Glu Asp

SEQLIST

50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Glu Leu Glu Ile Leu
65 70 75 80

<210> 13
<211> 80
<212> PRT
<213> Oryctolagus cuniculus

<400> 13
Glu Val Val Met Thr Gln Thr Pro Ala Ser Val Glu Ala Ala Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Arg
20 25 30
Pro Asn Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Arg
35 40 45
Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Gln Arg Glu Asp
50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Thr Gly Thr Lys Val Glu Ile Lys
65 70 75 80

<210> 14
<211> 80
<212> PRT
<213> Homo sapiens

<400> 14
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Phe Ala Thr Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
65 70 75 80

<210> 15
<211> 80
<212> PRT
<213> Homo sapiens

<400> 15
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Phe Ala Thr Tyr Tyr Cys Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
65 70 75 80

<210> 16
<211> 80
<212> PRT
<213> Homo sapiens

SEQLIST

<400> 16
 Ala Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
 20 25 30
 Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
 35 40 45
 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
 50 55 60
 Phe Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 65 70 75 80

<210> 17
 <211> 80
 <212> PRT
 <213> Mus musculus

<400> 17
 Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1 5 10 15
 Glu Arg Ala Thr Leu Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Ala
 20 25 30
 Pro Arg Leu Leu Ile Tyr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly
 35 40 45
 Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp
 50 55 60
 Phe Ala Val Tyr Tyr Cys Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 65 70 75 80

<210> 18
 <211> 80
 <212> PRT
 <213> Mus musculus

<400> 18
 Asp Ile Gln Met Asn Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
 1 5 10 15
 Asp Thr Ile Thr Ile Thr Cys Trp Tyr Gln Gln Lys Lys Gly Asn Ile
 20 25 30
 Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
 35 40 45
 Ser Gly Thr Gly Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
 50 55 60
 Ile Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 65 70 75 80

<210> 19
 <211> 80
 <212> PRT
 <213> Mus musculus

<400> 19
 Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Ala Gly
 1 5 10 15
 Asp Lys Val Thr Met Ser Cys Trp Tyr Gln Gln Lys Pro Trp Gln Pro
 20 25 30
 Pro Lys Leu Leu Ile Tyr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly
 35 40 45
 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp

SEQLIST

50		55		60
Leu	Ala	Val	Tyr	Tyr
65		70	Cys	Phe
			Gly	Ser
			Gly	Thr
			75	Lys
				Leu
				Glu
				Ile
				Lys
				80

<210> 20
 <211> 80
 <212> PRT
 <213> Mus musculus

<400> 20

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ala	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5					10					15	
Glu	Thr	Val	Thr	Ile	Thr	Cys	Trp	Tyr	Gln	Gln	Lys	Gln	Gly	Lys	Ser
			20					25					30		
Pro	Gln	Leu	Leu	Val	Tyr	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	Ser	Gly
		35				40					45				
Ser	Gly	Thr	Gln	Tyr	Ser	Leu	Lys	Ile	Asn	Ser	Leu	Gln	Pro	Glu	Asp
	50				55					60					
Phe	Gly	Ser	Tyr	Tyr	Cys	Phe	Ser	Asp	Gly	Thr	Arg	Leu	Glu	Ile	Lys
65					70				75						80

<210> 21
 <211> 80
 <212> PRT
 <213> Mus musculus

<400> 21

Ser	Ile	Val	Met	Thr	Gln	Thr	Pro	Lys	Phe	Leu	Pro	Val	Ser	Ala	Gly
1				5					10					15	
Asp	Arg	Val	Thr	Met	Thr	Cys	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ser
			20					25					30		
Pro	Lys	Leu	Leu	Ile	Tyr	Gly	Val	Pro	Asp	Arg	Phe	Thr	Gly	Ser	Gly
		35				40					45				
Ser	Gly	Thr	Asp	Phe	Thr	Phe	Thr	Ile	Ser	Ser	Val	Gln	Val	Glu	Asp
	50				55					60					
Leu	Ala	Val	Tyr	Phe	Cys	Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys
65					70				75						80

<210> 22
 <211> 79
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 22

Gln	Pro	Val	Leu	Thr	Gln	Ser	Pro	Ser	Ala	Ala	Ala	Ala	Leu	Gly	Ala
1				5					10					15	
Ser	Ala	Lys	Leu	Thr	Cys	Trp	Tyr	Gln	His	Gln	Lys	Gly	Glu	Ala	Pro
			20					25					30		
Arg	Tyr	Leu	Asp	Gly	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Ser	Ser
		35				40					45				
Gly	Ala	Asp	Arg	Tyr	Leu	Ile	Ser	Ser	Val	Gln	Ala	Asp	Asp	Glu	
	50				55				60						
Ala	Asp	Tyr	Tyr	Cys	Phe	Gly	Gly	Gly	Thr	Gln	Leu	Thr	Val	Thr	
65					70				75						

<210> 23
 <211> 79
 <212> PRT
 <213> Oryctolagus cuniculus

SEQLIST

<400> 23

Gln Pro Val Leu Thr Gln Ser Pro Ser Val Ser Ala Ala Leu Gly Ala
 1 5 10 15
 Ser Ala Arg Leu Thr Cys Trp Tyr Gln Gln Gln Gln Gly Glu Ala Pro
 20 25 30
 Arg Tyr Leu Asp Gly Gly Val Pro Asp Arg Phe Ser Gly Ser Ser Ser
 35 40 45
 Gly Ala Asp Arg Tyr Leu Ile Pro Ser Val Gln Ala Asp Asp Glu
 50 55 60
 Ala Asp Tyr Tyr Cys Phe Gly Gly Gly Thr Gln Leu Thr Val Thr
 65 70 75

<210> 24

<211> 79

<212> PRT

<213> Homo sapiens

<400> 24

Gln Pro Val Leu Thr Gln Ser Ser Ser Ala Ser Ala Ser Leu Gly Ser
 1 5 10 15
 Ser Val Lys Leu Thr Cys Trp His Gln Gln Gln Pro Gly Lys Ala Pro
 20 25 30
 Arg Tyr Leu Met Lys Gly Val Pro Asp Arg Phe Ser Gly Ser Ser Ser
 35 40 45
 Gly Ala Asp Arg Tyr Leu Thr Ile Ser Asn Leu Gln Leu Glu Asp Glu
 50 55 60
 Ala Asp Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 65 70 75

<210> 25

<211> 79

<212> PRT

<213> Homo sapiens

<400> 25

Gln Leu Val Leu Thr Gln Ser Pro Ser Ala Ser Ala Ser Leu Gly Ala
 1 5 10 15
 Ser Val Lys Leu Thr Cys Trp His Gln Gln Gln Pro Glu Lys Gly Pro
 20 25 30
 Arg Tyr Leu Met Lys Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser
 35 40 45
 Gly Ala Glu Arg Tyr Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp Glu
 50 55 60
 Ala Asp Tyr Tyr Cys Phe Gly Thr Gly Thr Lys Val Thr Val Leu
 65 70 75

<210> 26

<211> 79

<212> PRT

<213> Mus musculus

<400> 26

Gln Leu Val Leu Thr Gln Ser Ser Ser Ala Ser Phe Ser Leu Gly Ala
 1 5 10 15
 Ser Ala Lys Leu Thr Cys Trp Tyr Gln Gln Gln Pro Leu Lys Pro Pro
 20 25 30
 Lys Tyr Val Met Glu Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser
 35 40 45
 Gly Ala Asp Arg Tyr Leu Ser Ile Ser Asn Ile Gln Pro Glu Asp Glu

SEQLIST

50	Ala	Ile	Tyr	Ile	Cys	Phe	Gly	Gly	Gly	Thr	Lys	Val	Thr	Val	Leu
65						70					75				

<210> 27
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 27	Met	Gly	Trp	Ser	Cys	Ile	Ile	Leu	Phe	Leu	Val	Ala	Thr	Ala	Thr
1					5					10					15

<210> 28
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligo primer

<400> 28	tcgcactcaa cacagacgct cacc	24
----------	----------------------------	----

<210> 29
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligo primer

<400> 29	atggagactg ggctgcgctg gctt	24
----------	----------------------------	----

<210> 30
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligo primer

<400> 30	gctcagcgag tagaggcctg aggac	25
----------	-----------------------------	----

<210> 31
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligo primer

<400> 31	ttgggggggaa gatgaagaca gacgg	25
----------	------------------------------	----

SEQLIST

<210> 32
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligo primer

<400> 32
 cagtgcaggc aggacccagc atgg

24

<210> 33
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligo primer

<400> 33
 gccctggcag gcgtctcrct cta

23

<210> 34
 <211> 113
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 34
 Asp Ile Val Met Thr Gln Thr Pro Ser Ser Val Ser Ala Ala Val Gly
 1 5 10 15
 Gly Thr Val Thr Ile Lys Cys Gln Ala Ser Asp Asn Ile Tyr Ser Leu
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile
 35 40 45
 Tyr Tyr Thr Ser Asp Leu Thr Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Tyr Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys
 65 70 75 80
 Ala Asp Ala Ala Thr Tyr Tyr Cys Gln Ser Tyr His Tyr Ser Lys Ser
 85 90 95
 Ser Thr Tyr Val Asn Val Phe Gly Gly Gly Thr Glu Val Val Val Lys
 100 105 110
 Gly

<210> 35
 <211> 121
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 35
 Gln Ser Leu Glu Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Ala Ser
 1 5 10 15
 Leu Ala Leu Thr Cys Lys Ala Ser Gly Phe Ser Phe Ser Leu Ser Phe
 20 25 30
 Tyr Met Cys Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Ala Cys Ile Tyr Ser Gly Ser Ser Gly Ser Thr Tyr Tyr Ala Ser Trp
 50 55 60
 Ala Lys Gly Arg Phe Thr Ile Ser Lys Thr Ser Ala Thr Thr Val Thr
 Page 10

SEQLIST

65					70					75					80
Leu	Gln	Met	Thr	Thr	Leu	Thr	Ala	Ala	Asp	Thr	Ala	Thr	Tyr	Phe	Cys
				85					90					95	
Ala	Arg	Ser	Ala	Ser	Ser	Thr	Thr	Phe	His	Tyr	Phe	Asn	Leu	Trp	Gly
			100					105					110		
Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser							
		115					120								

<210> 36
 <211> 87
 <212> PRT
 <213> Mus musculus

<400> 36

Glu	Val	Lys	Leu	Gln	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1				5				10						15	
Ser	Leu	Lys	Leu	Ser	Cys	Ala	Thr	Ser	Gly	Phe	Thr	Phe	Ser	Trp	Val
			20					25					30		
Arg	Gln	Thr	Pro	Glu	Lys	Arg	Leu	Glu	Trp	Val	Ala	Arg	Phe	Thr	Ile
		35					40					45			
Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Leu	Tyr	Leu	Gln	Met	Ser	Arg	Leu
		50				55					60				
Lys	Ser	Glu	Asp	Thr	Ala	Met	Tyr	Tyr	Cys	Ala	Arg	Trp	Gly	Gln	Gly
65					70				75					80	
Thr	Thr	Val	Thr	Val	Ser	Ser									
				85											

<210> 37
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 37

Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1				5				10						15	
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Val	Ser	Trp	Val
			20					25					30		
Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	Ser	Arg	Phe	Thr	Ile
		35					40					45			
Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu
		50				55					60				
Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Trp	Gly	Gln	Gly
65					70				75					80	
Thr	Leu	Val	Thr	Val	Ser	Ser									
				85											

<210> 38
 <211> 85
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 38

Gln	Ser	Leu	Glu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Lys	Pro	Gly	Ala	Ser
1				5				10						15	
Leu	Ala	Leu	Thr	Cys	Lys	Ala	Ser	Gly	Phe	Ser	Phe	Ser	Trp	Val	Arg
			20					25					30		
Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile	Ala	Arg	Phe	Thr	Ile	Ser
		35				40						45			
Lys	Thr	Ser	Ala	Thr	Thr	Val	Thr	Leu	Gln	Met	Thr	Thr	Leu	Thr	Ala
	50					55				60					

SEQLIST

Ala	Asp	Thr	Ala	Thr	Tyr	Phe	Cys	Ala	Arg	Trp	Gly	Gln	Gly	Thr	Leu
65					70					75					80
Val	Thr	Val	Ser	Ser											
				85											

<210> 39
 <211> 84
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 39															
Gln	Ser	Val	Glu	Glu	Ser	Gly	Gly	Arg	Leu	Val	Thr	Pro	Gly	Thr	Pro
1				5					10					15	
Leu	Thr	Leu	Thr	Cys	Thr	Val	Ser	Gly	Phe	Ser	Leu	Ser	Trp	Val	Arg
			20					25					30		
Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile	Gly	Arg	Phe	Thr	Ile	Ser
		35				40						45			
Lys	Thr	Ser	Thr	Thr	Val	Asp	Leu	Lys	Ile	Thr	Ser	Pro	Thr	Thr	Glu
	50					55					60				
Asp	Thr	Ala	Thr	Tyr	Phe	Cys	Ala	Arg	Trp	Gly	Thr	Gly	Thr	Leu	Val
65					70					75					80
Thr	Ile	Ser	Ser												

<210> 40
 <211> 86
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 40															
Gln	Ser	Val	Lys	Glu	Ser	Glu	Gly	Gly	Leu	Phe	Lys	Pro	Thr	Asp	Thr
1				5					10					15	
Leu	Thr	Leu	Thr	Cys	Thr	Val	Ser	Gly	Phe	Ser	Leu	Ser	Trp	Val	Arg
			20					25					30		
Gln	Ala	Pro	Gly	Asn	Gly	Leu	Glu	Trp	Ile	Gly	Arg	Ser	Thr	Ile	Thr
		35				40						45			
Arg	Asn	Thr	Asn	Leu	Asn	Thr	Val	Thr	Leu	Lys	Met	Thr	Ser	Leu	Thr
	50				55						60				
Ala	Ala	Asp	Thr	Ala	Thr	Tyr	Phe	Cys	Ala	Arg	Trp	Gly	Gln	Gly	Thr
65					70					75					80
Leu	Val	Thr	Val	Ser	Ser										
				85											

<210> 41
 <211> 85
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 41															
Gln	Ser	Leu	Glu	Glu	Ser	Gly	Gly	Asp	Leu	Val	Lys	Pro	Gly	Ala	Ser
1				5					10					15	
Leu	Thr	Leu	Thr	Cys	Thr	Ala	Ser	Gly	Phe	Ser	Phe	Ser	Trp	Val	Arg
			20					25					30		
Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile	Ala	Arg	Phe	Thr	Ile	Ser
		35				40						45			
Lys	Thr	Ser	Ser	Thr	Thr	Val	Thr	Leu	Gln	Met	Thr	Ser	Leu	Thr	Ala
	50				55						60				
Ala	Asp	Thr	Ala	Thr	Tyr	Phe	Cys	Ala	Arg	Trp	Gly	Pro	Gly	Thr	Leu
65					70					75					80
Val	Thr	Val	Ser	Ser											

SEQLIST

85

<210> 42
<211> 87
<212> PRT
<213> Homo sapiens

<400> 42
Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Trp Gly Arg Gly
65 70 75 80
Thr Leu Val Thr Val Ser Ser
85

<210> 43
<211> 87
<212> PRT
<213> Homo sapiens

<400> 43
Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Ile Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Met Val Thr Val Ser Ser
85

<210> 44
<211> 87
<212> PRT
<213> Homo sapiens

<400> 44
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Thr Val Thr Val Ser Ser
85

SEQLIST

<210> 45
 <211> 87
 <212> PRT
 <213> Mus musculus

<400> 45
 Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
 1 5 10 15
 Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Trp Val
 20 25 30
 Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Leu Gly Arg Leu Ser Ile
 35 40 45
 Ser Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn Ser Leu
 50 55 60
 Gln Thr Asp Asp Thr Ala Met Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
 65 70 75 80
 Thr Leu Val Thr Val Ser Ala
 85

<210> 46
 <211> 87
 <212> PRT
 <213> Mus musculus

<400> 46
 Glu Val Met Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
 20 25 30
 Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Arg Phe Thr Ile
 35 40 45
 Ser Arg Asp Asn Ala Lys Asn Asn Leu Tyr Leu Gln Met Ser Ser Leu
 50 55 60
 Arg Ser Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg Trp Gly Ala Gly
 65 70 75 80
 Thr Thr Val Thr Val Ser Ser
 85

<210> 47
 <211> 87
 <212> PRT
 <213> Mus musculus

<400> 47
 Glu Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
 20 25 30
 Arg Gln Ser Pro Glu Lys Arg Leu Glu Trp Val Ala Arg Phe Thr Ile
 35 40 45
 Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Ser Ser Leu
 50 55 60
 Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Thr Arg Trp Gly Gln Gly
 65 70 75 80
 Thr Thr Leu Thr Val Ser Ser
 85

<210> 48
 <211> 80
 <212> PRT

SEQLIST

<213> Mus musculus

<400> 48

```

Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
 1           5           10           15
Asp Thr Ile Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Asn Ile
           20           25           30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
           35           40           45
Ser Gly Thr Gly Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
           50           55           60
Ile Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
65           70           75           80

```

<210> 49

<211> 80

<212> PRT

<213> Homo sapiens

<400> 49

```

Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly
 1           5           10           15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
           20           25           30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
           35           40           45
Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp
           50           55           60
Phe Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
65           70           75           80

```

<210> 50

<211> 80

<212> PRT

<213> Oryctolagus cuniculus

<400> 50

```

Asp Ile Val Met Thr Gln Thr Pro Ser Ser Val Ser Ala Ala Val Gly
 1           5           10           15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
           20           25           30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
           35           40           45
Tyr Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
           50           55           60
Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Glu Val Val Val Lys
65           70           75           80

```

<210> 51

<211> 80

<212> PRT

<213> Oryctolagus cuniculus

<400> 51

```

Ala Tyr Asp Met Thr Gln Thr Pro Ala Ser Val Glu Val Ala Val Gly
 1           5           10           15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Arg
           20           25           30
Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
           35           40           45

```

SEQLIST

Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Glu Cys Ala Asp
 50 55 60
 Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Glu Val Val Val Lys
 65 70 75 80

<210> 52
 <211> 80
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 52
 Asp Val Val Met Thr Gln Thr Pro Ala Ser Val Ser Glu Pro Val Gly
 1 5 10 15
 Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30
 Pro Lys Leu Leu Ile Ser Gly Val Ser Ser Arg Phe Lys Ala Ser Arg
 35 40 45
 Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
 50 55 60
 Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Val Val Val Glu
 65 70 75 80

<210> 53
 <211> 80
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 53
 Ala Leu Val Met Thr Gln Thr Pro Ala Ser Val Ser Ala Ala Val Gly
 1 5 10 15
 Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30
 Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Arg
 35 40 45
 Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Arg Glu Asp
 50 55 60
 Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Glu Leu Glu Ile Leu
 65 70 75 80

<210> 54
 <211> 80
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 54
 Glu Val Val Met Thr Gln Thr Pro Ala Ser Val Glu Ala Ala Val Gly
 1 5 10 15
 Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Arg
 20 25 30
 Pro Asn Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Arg
 35 40 45
 Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Gln Arg Glu Asp
 50 55 60
 Ala Ala Thr Tyr Tyr Cys Phe Gly Thr Gly Thr Lys Val Glu Ile Lys
 65 70 75 80

<210> 55
 <211> 80
 <212> PRT

SEQLIST

<213> Homo sapiens

<400> 55

```

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20      25      30
Pro Lys Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35      40      45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50      55      60
Phe Ala Thr Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
65      70      75      80

```

<210> 56

<211> 80

<212> PRT

<213> Homo sapiens

<400> 56

```

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20      25      30
Pro Lys Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35      40      45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50      55      60
Phe Ala Thr Tyr Tyr Cys Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
65      70      75      80

```

<210> 57

<211> 80

<212> PRT

<213> Homo sapiens

<400> 57

```

Ala Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20      25      30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35      40      45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50      55      60
Phe Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
65      70      75      80

```

<210> 58

<211> 80

<212> PRT

<213> Homo sapiens

<400> 58

```

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1      5      10      15
Glu Arg Ala Thr Leu Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Ala
20      25      30
Pro Arg Leu Leu Ile Tyr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly
35      40      45

```

SEQLIST

Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp
 50 55 60
 Phe Ala Val Tyr Tyr Cys Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 65 70 75 80

<210> 59
 <211> 80
 <212> PRT
 <213> Mus musculus

<400> 59
 Asp Ile Gln Met Asn Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
 1 5 10 15
 Asp Thr Ile Thr Ile Thr Cys Trp Tyr Gln Gln Lys Lys Gly Asn Ile
 20 25 30
 Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
 35 40 45
 Ser Gly Thr Gly Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
 50 55 60
 Ile Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 65 70 75 80

<210> 60
 <211> 80
 <212> PRT
 <213> Mus musculus

<400> 60
 Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Ala Gly
 1 5 10 15
 Asp Lys Val Thr Met Ser Cys Trp Tyr Gln Gln Lys Pro Trp Gln Pro
 20 25 30
 Pro Lys Leu Leu Ile Tyr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly
 35 40 45
 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp
 50 55 60
 Leu Ala Val Tyr Tyr Cys Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
 65 70 75 80

<210> 61
 <211> 80
 <212> PRT
 <213> Mus musculus

<400> 61
 Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Glu Thr Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Gln Gly Lys Ser
 20 25 30
 Pro Gln Leu Leu Val Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
 35 40 45
 Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Pro Glu Asp
 50 55 60
 Phe Gly Ser Tyr Tyr Cys Phe Ser Asp Gly Thr Arg Leu Glu Ile Lys
 65 70 75 80

<210> 62
 <211> 80
 <212> PRT

SEQLIST

<213> Mus musculus

<400> 62

Ser	Ile	Val	Met	Thr	Gln	Thr	Pro	Lys	Phe	Leu	Pro	Val	Ser	Ala	Gly
1				5					10					15	
Asp	Arg	Val	Thr	Met	Thr	Cys	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ser
			20					25					30		
Pro	Lys	Leu	Leu	Ile	Tyr	Gly	Val	Pro	Asp	Arg	Phe	Thr	Gly	Ser	Gly
		35					40					45			
Ser	Gly	Thr	Asp	Phe	Thr	Phe	Thr	Ile	Ser	Ser	Val	Gln	Val	Glu	Asp
	50					55					60				
Leu	Ala	Val	Tyr	Phe	Cys	Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys
65					70					75					80

<210> 63

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic oligopeptide

<221> VARIANT

<222> 3

<223> Xaa = Any Amino Acid

<400> 63

Gly	Gly	Xaa	Gly	Gly
1				5